

ABSTRACT

There is provided an excimer laser device capable of producing a stable oscillation
5 even at a high repetition rate of 4 kHz. This gas laser device is comprised of a laser chamber
having laser gas filled therein; a pair of main discharge electrodes arranged in the laser chamber;
a cross-flow fan for circulating the laser gas within the laser chamber at least between the
main discharge electrodes; and a diameter of the cross-flow fan is 150 mm or less, its peripheral
speed being 25.0 m/s or more.